

AMENDMENTS TO THE SPECIFICATION

Please amend the paragraph beginning on page 5, line 10, as follows:

In an illustrative embodiment of the present invention, the medical device of the present invention is embodied as a pulse oximeter. FIGURE 1 is a block diagram illustrative of a pulse oximeter system 100 utilized in accordance with the present invention. The pulse oximeter system includes a medium 102 for measuring arterial oxygen saturation such as a finger or earlobe. The pulse oximeter system 100 also includes an LED signal generator 104 that can include one or more LEDs for transmitting light. The pulse oximeter system 100 further includes a photodetector signal generator ~~[[104]]~~ 106 for absorbing the light from the LED signal generator 104 as it passes through the medium 102 and for generating a signal corresponding to the detected light. The pulse oximeter system 100 also includes an oximeter processing system 108 for controlling the generation of the light from the LED signal generator 104 and for processing the signals generated by photodetector signal generator 106. One skilled in the present invention will appreciate that the medium ~~[[100]]~~ 102 will absorb and scatter a particular wavelength of light depending on the characteristics of the medium. Based on this principle, the oximeter processing system 108 can then calculate the arterial oxygen saturation of the tested medium. The function of pulse oximeters is well known in the present art and will not be described in greater detail.

Please amend the paragraph beginning on page 5, line 27, as follows:

With reference now to FIGURE 2, an illustrative circuit 200 of a pulse oximeter system 100 (FIGURE ~~[[100]]~~ 1) for implementing the information transmitting function of the present invention will be described. The circuit 200 includes an LED signal generator 104 that includes two parallel LEDs 202, 204. In an illustrative embodiment of the present invention, each LED 202, 204 corresponds to a different wavelength of light. For example, one LED may correspond to a wavelength in the red, or near red, light on the electromagnetic spectrum while another LED may correspond to a wavelength in the infrared, or near infrared, light on the electromagnetic spectrum. The circuit 200 also includes a photodetector signal generator ~~[[104]]~~

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106 that includes a photodetector 206 that receives light generated by the LEDs 202, 204 and generates a photocurrent corresponding to the detected light. The photodetector 206 and the LEDs 202, 204 are connected electrically in parallel. Further, as illustrated in FIGURE 2, a schottkey diode 208 is also connected in parallel to the LEDs 202, 204 and the photodetector 206.

Please amend the paragraph beginning on page 6, line 8, as follows:

The circuit 200 also includes an information transmission component 210 in which information may be stored and read. In an illustrative embodiment of the present invention, the information transmission component 210 may be embodied in a permanent storage media such that the information cannot be modified or additional information may not be stored in the component. Additionally, all, or a portion, of the information transmission component 210 may be embodied in a writable, permanent storage media such that some information may be added to the component. Alternatively, ~~[[he]]~~ the information transmission component 210 may be embodied in a writable, nonpermanent storage media such that some or all of the information may be overwritten. An example of an information storage component 210 can include an identification chip, such as the Dallas Semiconductor DS 1990 or DS 2401. Another example of an information storage component 210 can include electrical components, such as a resistor, whose characteristics have a value that corresponds to information. For example, the resistive value of a resistor may correspond to the precise wavelength of an LED 202, 204. As illustrated in FIGURE 2, the information transmission component is configured in parallel to the photodetector 206 and does not require additional wiring to be connected to the circuit 200.

Please amend the paragraph beginning on page 8, line 18, as follows:

The circuit 300 also includes an oximeter processing system 108 that is utilized to drive the LED signal generator ~~[[102]]~~ 104 and process signals coming from the photodetector signal generator ~~[[104]]~~ 106. The oximeter processing system 108 also generates a signal that can cause the information transmission component 310 to transmit information to be processed by

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the oximeter processing system. The oximeter processing system 108 includes two sets of switches 312, 314 which are connected to either an LED drive for causing the LEDs 302, 304 to generate light or a ground to allow no current to flow. The oximeter processing system 108 also includes a filter 316 for processing the signal from the photodetector 306, which is further transmitted to a microprocessor (not shown) for determining the arterial oxygen saturation of the medium 102. One skilled in the relevant art will appreciate that these components are well known for use in the function of pulse oximeters and will not be described in greater detail. The oximeter processing system 108 further includes an operational amplifier 318 ~~[[an]]~~ and two nodes 320, 322 that are utilized to sense current that is flowing through the LEDs 302, 304. The two nodes 320, 322 will also be utilized to provide a power source to the information transmission component 310 and to read the information transmitted from the information transmission component, as will be explained in greater detail below. As illustrated in FIGURE 3, node 320 may include an additional resistor connected in series.